

An aerial photograph of a city, likely Washington D.C., showing a dense urban landscape with a river (the Potomac River) winding through it. Major highways and bridges are visible, along with various buildings and green spaces. The image is used as a background for the text.

IV. Analysis of Existing Conditions

The current state of the South Capitol Street corridor is such that it cannot be considered a gateway to the nation's capital. The work of this study would be incomplete without a comprehensive understanding of the area's existing conditions. This information is essential to finding solutions.



The South Capitol Gateway and Corridor Improvement Study began with the *Existing Conditions Analysis*, completed in early 2003. This document includes technical data that underscores the need to make fundamental changes to South Capitol Street's transportation infrastructure.

The findings of the Existing Conditions Analysis are summarized in this section. The entire document is available on DDOT's web site.

[http://ddot.dc.gov/information/
documents/frames/south_
capitol/existing_conditions.shtm](http://ddot.dc.gov/information/documents/frames/south_capitol/existing_conditions.shtm)

Analysis of Existing Conditions

The view up South Capitol Street has become an infamous symbol of failed post-World War II planning and transportation policies. This bleak vista, however, only begins to suggest the problems within the study area. Because the freeway system proposed for the District of Columbia was never finished, South Capitol Street and the Southeast-Southwest Freeway are incomplete fragments of that transportation network. Despite the massive effort to construct the freeway and make South Capitol Street an arterial thoroughfare to handle high traffic volumes, congestion is pervasive and gets worse each year.

To many, the experience of traveling on South Capitol Street is visually displeasing. However, its inability to function both as a multimodal local street and as a regional transportation artery is equally problematic. The first step toward creating the South Capitol Street gateway requires a thorough documentation and analysis of the corridor's existing conditions.

The South Capitol Gateway and Improvement Study Existing Conditions Analysis, which is summarized here, documents the corridor's physical and sociological characteristics. This includes traffic data, information on local communities, an inventory of park properties, the potential of encountering hazardous materials, and the location of cultural resources and utilities. Analysis of this data will inform the next steps in the process that will ultimately change South Capitol and adjacent streets into a working transportation network that will benefit local neighborhoods, the city, and the Metropolitan Washington Region.

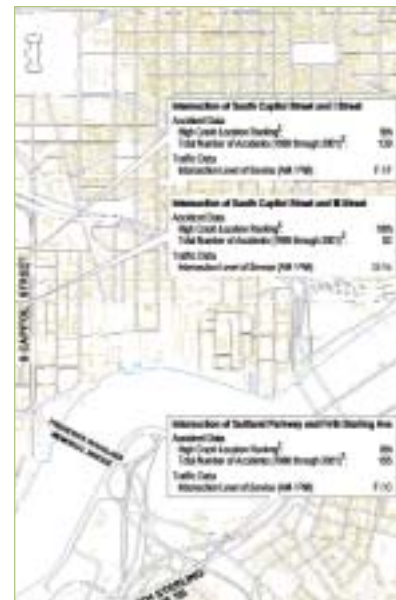


Diagram showing problem intersections along the South Capitol Street corridor



Train tracks along the Virginia Avenue alignment with Washington Monument to the northwest



Abandoned substation from the Pennsylvania Railroad near the intersection of South Capitol and Eye Streets SE



View underneath Southeast Freeway's elevated ramps



Aerial view of South Capitol Street and Southeast Freeway with U.S. Capitol to the north

The first indicator of South Capitol Street's inability to function as an urban boulevard is the elevated railroad track just two blocks south of the U.S. Capitol Grounds. Constructed in the 1880s by the Pennsylvania Railroad, this infrastructure cuts through the Capitol Hill neighborhood and continues on the old Virginia Avenue alignment to the northwest. This railroad track set the precedent for future highways to follow it.

An aerial view of South Capitol Street's north end indicates even more clearly how the corridor has been overwhelmed by elevated transportation infrastructure. Just a few blocks south of the Capitol, Interstate 395 creates a massive wall that separates Capitol Hill from the city to the south.



Aerial view of New Jersey Avenue SE and Southeast Freeway

A closer view of the freeway from above suggests how the land on both sides of South Capitol Street is underutilized. Because the freeway's construction required demolishing hundreds of buildings, its path of destruction was far wider than the highway's right-of-way. In addition to the land taken by eminent domain, residents and businesses fled the area in anticipation of the project's negative impact on the neighborhood. The subsequent disinvestment has kept the corridor economically stagnant for nearly half a century. The intervention of the highway also prompted the closing of many streets, which hinders movement within and between local neighborhoods.

Underutilization of land is also clear underneath the freeway ramps. Since they were designed exclusively to carry arterial traffic, the ramps prohibit any other land uses. The residual space below them is a dark and dangerous wasteland.



New Jersey Avenue SE north of Southeast Freeway



New Jersey Avenue SE south of Southeast Freeway



Pedestrian walking along South Capitol Street near Eye Street SE



Cyclist attempting to turn onto South Capitol Street from Eye Street SE

The bleak condition of South Capitol Street is paralleled by that of New Jersey Avenue to the east. New Jersey Avenue also demonstrates how radically the freeway construction transformed adjacent neighborhoods. Above I-395, Victorian rowhouses fronted with wrought iron fences line the tree-lined avenue. The barren area immediately south of the freeway is dominated by parking lots and abandoned buildings, further evidence of the area's chronic disinvestment.

The highway's negative impact on its surroundings is as obvious from the ground as it is from the air. The tangle of highway ramps that distribute traffic to other roadways appears even worse when combined with elevated signs, cobra head light fixtures, and concrete barriers. The heavy traffic volumes carried on multiple lanes also makes walking and biking on South Capitol Street extremely dangerous.

Because South Capitol Street is formally designated as a freeway in the District's roadway system, cross streets have been blocked to reduce the number of intersections. Narrow sidewalks, the absence of trees, the lack of on-street parking and the speed of passing vehicles further discourage bicyclists and pedestrians.



South Capitol's underpass below the intersection at M Street

Eye Street is the first local street that crosses South Capitol beyond the freeway ramps. The disconnection between it and the elevated, arterial ramps is typical of the study area's cross streets. Although this intersection carries large traffic volumes, there is not sufficient room for vehicles to merge where the ramps reach street level. Southbound traffic from the freeway encounters a traffic signal and a right-turn-only lane at this point. Northbound traffic passing through must weave across several lanes in a short distance to reach the freeway entrance ramp.

Inadequate signage and narrow lanes contribute to the hazards this intersection, which is ranked the ninth worst in the District of Columbia for its high volume of right-angle and rear-end collisions. The ramps that channel such large volumes here also interrupt the sidewalks and obstruct access to nearby neighborhoods.

Although traffic that merges from I-395 to South Capitol is brought to an abrupt halt at Eye Street, it is immediately encouraged to accelerate as South Capitol approaches M Street and dips beneath it. Narrow lanes, poor pavement condition, and short sight distances contribute to this intersection's ranking as the 18th worst accident location in the District of Columbia.



Concrete plant east of South Capitol Street along the Anacostia River



Douglass Memorial Bridge steel section loss



Douglass Memorial Bridge failed bearing plate at south-east abutment



Frederick Douglass Memorial Bridge looking toward the Navy Yard from the east of the Anacostia River

Current land use along the corridor is almost entirely commercial. Warehouses, gas stations, chain restaurants, and a few small businesses line the blocks between the Southeast Freeway and the Anacostia River. The only houses on South Capitol are located between N and P Streets. South of Potomac Avenue, land is either used for industrial purposes or is vacant.

The bleak conditions for pedestrians and cyclists continue along South Capitol Street to the Frederick Douglass Memorial Bridge. This has the effect of extending the corridor's arterial character east of the Anacostia River. Pedestrians and cyclists share the narrow, five-foot walkways on both sides, but at their peril. The bridge's height and urbanistically insensitive design have prohibited development in its vicinity. The few industrial businesses located near the bridge handle concrete, gravel, asphalt, and waste.

Built in 1949, the Frederick Douglass Memorial Bridge is in poor condition and will soon require replacement. The District Department of Transportation plans to carry out minimal rehabilitation to extend the bridge's life approximately fifteen years.

Situated east of the Anacostia River, the interchange of South Capitol Street, Suitland Parkway, and I-295 is a complex maze of ramps and connector roads. The interchange is functionally deficient, confusing to use, and unattractive. Roadways that should provide access to the waterfront block it instead.

The I-295 interchange includes unnecessary and duplicate roadway connections. These inefficiencies and redundancies consume several acres of land. The complexity of the interchange makes it difficult for drivers to navigate, a problem compounded by inadequate signage. Although complex, the interchange is also incomplete. There is no ramp between southbound I-295 and northbound South Capitol Street. Howard Road substitutes for this missing link conducting traffic onto a local street.

Two streets, Firth Sterling Avenue and Martin Luther King, Jr. Avenue, provide the only access across Suitland Parkway in this area. The intersection of the Suitland Parkway and Firth Sterling Avenue forces high-speed traffic from the parkway to stop. The sight distance for approaching traffic is short and signage is inadequate. These factors cause it to be the intersection with the 8th highest accident rate in the District. More importantly, it has the highest fatality rate of any District intersection. Rear-end accidents are the most common. Accidents involving pedestrians are especially frequent. MLK is grade separated from the parkway, so it allows safe crossing but this intersect permits no access between the neighborhoods and the parkway.



Portion of the I-295 and Suitland Parkway Interchange



Intersection at Firth Sterling Avenue and Martin Luther King, Jr. Avenue, which has the highest fatality rate in the District of Columbia

